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ABSTRACT

In 1964, 1966, and 1970, studies were conducted among the adult (21 and over) population of the United States in order to determine attitudes, knowledge, and behavior related to the use of tobacco--especially cigarette smoking. With a lapse of five years since the last national study, it was necessary to determine what changes in behavior and attitudes had taken place since 1970; therefore, this 1975 study was undertaken. The purpose of this survey was twofold: to evaluate possible changes in knowledge, attitudes, beliefs, and behavior concerning smoking that have taken place since 1970; and to provide in-depth information to all who have continuing and concerted interest in the problem, so that all smoking programs can be maximally effective. The majority of the interviews were conducted by telephone where available; the remainder in face-to-face interviews. The data are based on approximately 12,000 interviews of adults, 21 and over, all of which were conducted by Chilton Research Services of Philadelphia. The findings are organized with respect to demographic data, attitudes, perception of environment, smoking history, dosage, other forms of tobacco, and changes in smoking behavior. (Author)

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1975 ADULT USE OF TOBACCO

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

Center for Disease Control
Bureau of Health Education
Atlanta, Ga. 30333

JUNE 1976

National Institutes of Health
National Cancer Institute
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National Institutes of Health
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INTRODUCTION

In 1964, 1966 and 1970, studies were conducted among the adult (21 and over) population of the United States in order to determine attitudes, knowledge, and behavior related to use of tobacco--especially cigarette smoking.

The 1964 study was the first national study in this area and established baseline data. The 1966 and 1970 studies included reinterviews with respondents who had participated in previous studies. All interviews were conducted with adults 21 years of age and over, both cigarette smokers and noncigarette smokers.

Since the study of cigarette smoking among adults in the United States in 1970, federal and private agencies have exerted considerable efforts to educate smokers about the known adverse effects of smoking on health. Legislation has been enacted to warn current smokers, to discourage new smokers and to protect nonsmokers. Efforts to discourage smoking, such as placing restrictions on cigarette advertising, mandatory warning labels on cigarette packs, and increasing taxes on cigarettes, have been made.

With a lapse of five years since the last national study, it is necessary to determine what changes in behavior and attitudes have taken place since 1970; therefore, this 1975 study was undertaken.

Detailed information is available on respondents who participated in the 1964, 1966 and 1970 studies. By comparing changes in 1975 behavior and attitudes with previous years, these continuing studies provide valuable information about trends on progress of altering smoking behavior.

Also, information about attempts to cease or change cigarette smoking practices is useful in determining the factors related to stopping cigarette smoking.

Finally, the attitudes and perceptions of both smokers and non-smokers provide a description of the national environment in which anti-smoking forces must operate.

BACKGROUND

Cigarette smoking continues to pose a major public health problem in the United States, in spite of more than ten years of effort on the part of concerned organizations and individuals to counteract it. The extent and nature of the problem are the subject of continued study by the Federal Government. The first national survey was conducted in 1964 and was followed by surveys in 1966, 1970, and the one reported on here, in 1975. Results from the 1964 and 1966 surveys are described in Use of Tobacco,[1] those of the 1970 survey are contained in Adult Use of Tobacco 1970.[2]

Purpose. The purpose of the 1975 survey was twofold: (1) to evaluate possible changes in knowledge, attitudes, beliefs, and behavior concerning smoking that have taken place since 1970, and (2) to provide in-depth information to all who have a continuing and concerted interest in the problem, so that all smoking programs can be maximally effective.

Sample. The majority of the interviews were conducted by telephone, the remainder in face-to-face interviews in non-telephone households. The data are based on approximately 12,000 interviews of adults 21 and over, all of which were conducted by Chilton Research Services of Philadelphia.

The telephone samples were randomly selected by a computer from a bank of all possible combinations of area codes, telephone exchanges, and subscriber numbers with a sufficient surplus of selections to allow for the elimination of nonresidence telephones. Standardized questionnaires were administered by trained professional interviewers. The non-telephone samples were designed to allow greater representation in geographic areas known to have a high prevalence of non-telephone households.

Definitions. The respondents were classified by smoking status into one of the following categories:

- Never Smoker - A person who has never smoked as many as as 100 cigarettes (5 packages) in his life.
- Ever Smoker - A person who has smoked at least 100 cigarettes during his lifetime.

[1]U.S. Department of Health, Education, and Welfare, Use of Tobacco: Practices, Attitudes, Knowledge, and Beliefs. Public Health Service, July, 1969.

[2]U.S. Department of Health, Education, and Welfare, Adult Use of Tobacco - 1970. Public Health Service, June, 1973.

Definitions. (continued)

- Current Smoker - An ever smoker who now smokes cigarettes.
- Former Smoker - An ever smoker who does not now smoke cigarettes, but who once did.

Organization of the Report. The salient results of interest to a wide audience are outlined in the section titled Discussion of Findings. Those with special interests should examine appropriate tables in more detail. In some cases, comparisons are made with earlier findings; readers concerned with other comparisons should refer to previous publications.

DISCUSSION OF FINDINGS

I. Demographic Data

A. Age and Sex

Between 1970 and 1975, there was a slight decrease in the proportion of adult cigarette smokers in the United States. In 1970, 42.2 percent of adult males reported that they were cigarette smokers while in 1975, 39.3 percent were smokers. The corresponding percentages for females were 30.5 percent in 1970 and 28.9 percent in 1975.

Among men, decreases in the proportion of smokers were observed in every age group except the oldest. There was practically no change in the proportion of men aged 65 and over who are cigarette smokers. Among women, there was a small increase in the number of smokers in the youngest age group 21-24 years of age, and a slight increase in the 55 to 64 year old age group. There was no change in smoking behavior of women who were 65 years of age or older. There was a decrease in the proportion of cigarette smokers in all other age groups.

In every age group, in both sexes, the proportion of smokers was smaller than would have been predicted from previous data obtained in 1970.

Chart 1 shows the proportion of current smokers in each age and sex category for each of the four surveys.

B. Marital Status

The majority of the respondents (78 percent of the men and 71 percent of the women) replied that they were married. Since they comprise such a large part of the total population, their smoking rates parallel those of the total population. In the married group there is a slight drop in the proportion of current smokers since 1970--from 40 percent to 38 percent for males, and from 32 percent to 28 percent for females.

About the same percentage of males who have never been married and males who are married are current smokers. Single females have a slightly higher rate than those who are married (31 percent and 28 percent respectively). Both males and females show a substantially lower smoking rate than in 1970 (56 percent of single males and 36 percent of single females were current smokers in 1970).

The highest smoking rates are among those who are divorced or separated. While only one-third of the respondents who are married and living with spouse are smokers, 60 percent of the men and 50 percent of the women who are divorced or separated are smokers. This represents a substantial decrease from the 1970 data showing that 76 percent of the men who were divorced or separated were smokers, but at the same time, it represents an increase from the 44 percent rate for women reported in that year.

Men who are widowed have a slightly lower smoking rate (36 percent) than those who are married (38 percent). Widowed women, however, have a much lower rate (19 percent) of cigarette smoking than do married women (28 percent). This probably reflects the lower smoking rate among older women. The proportion of smokers among both males and females in this marital category (widowed) is little different from that observed in 1970.

To summarize the marital status category, the data show that men and women who are divorced or separated are more likely to be cigarette smokers than are persons who are married, widowed, or single. In all marital categories, a greater proportion of men than of women are smokers.

C. Socioeconomic Status

1. Educational Level. The smoking rates are lowest for those who never went to high school--37 percent for men and 18 percent for women. Because educational level is related to income, there may be a corollary between income and the cost of cigarettes for persons in this education group.

At all other educational levels there is a decided relationship between the amount of education and smoking behavior, with a decrease in the proportion of smokers at higher educational levels. Among males, those who attended high school but not college showed 46 percent current smokers, those with some college, 36 percent, and those who graduated from college, 28 percent. Comparable proportions for women are 32 percent, 32 percent, and 21 percent. An examination of quit rates shows that half of the college graduates who ever smoked cigarettes are now former smokers.

2. Occupation. Among males, white collar workers (including sales personnel) are much less likely to be current smokers (36 percent) than are those in all other occupations (47 percent). This finding is consistent with the relationship between educational level and smoking behavior.

Two-fifths of the women in the sample reported that they are employed outside the home. Of these employed women, one-third are current smokers, while only 27 percent of those who classify themselves as housewives are smokers. This finding tallies with previous evidence of greater prevalence of smoking among working women.

Among the employed women, white collar workers are more likely to smoke than are those in other occupations (34 percent and 32 percent, respectively) - a relationship opposite to that found among men.

3. Income. Family income is related to smoking rates with both males and females, but in different ways. Men in relatively affluent families are less likely to smoke while women in this group are more likely to be current smokers. Only 35 percent of the men who reported an annual family income of $20,000 or more are cigarette smokers, while 46 percent of the men in the $7,500-$10,000 range are smokers. Among women, however, there is an increase in smoking from 24 percent for those in families earning under $3,000 to 34 percent for those with incomes of $20,000 or more.

II. Attitudes

In this part of the survey, respondents were asked the extent of their agreement with each of 19 attitude statements. For each statement, they indicated their preferences by choosing one of the following categories that best represented their attitudes: "strongly agree", "mildly agree", "no opinion", (or "don't know"), "mildly disagree", "strongly disagree".

To facilitate interpretation of the data, results are reported here by only three categories: "agree" (the sum of "strongly agree", and "mildly agree") "no opinion", and "disagree" (the sum of "mildly disagree" and "strongly disagree"). In addition, unless otherwise noted, all results in this section are reported for males and females combined, as there are few sex differences in responses to these questions.

A. Smoking and Health

A very large majority of respondents believe that cigarette smoking is detrimental to health, as evidenced by the fact that 90 percent agree that smoking is harmful, 84 percent think it is enough of a health hazard for something to be done about it, and 82 percent believe it frequently causes disease and death. Although the agreement with each of these statements was extremely high in 1970 (87 percent, 86 percent, and 76 percent, respectively), it was even higher in 1975 on two of the three items. Agreement

rose from 87 percent to 90 percent on the statement about smoking being harmful to health, and from 76 percent to 82 percent on the one concerning disease and death. The slight decrease from 86 percent to 84 percent on the statement concerning the importance of doing something about the hazard of cigarette smoking reflects a change among current smokers only, but not for former smokers or those who have never smoked.

Even those who are current smokers show a high rate of agreement with these three statements. The agreement rate is around 70 percent for the statements on health hazard and disease and death, and 80 percent on the general statement about harmfulness to health.

In summary, awareness of the definite relationship between smoking and health has increased greatly over the past decade.

B. Remedial Action - General

Most people acknowledge that smoking has harmful effects on health. However, there are still a substantial number who feel that the status quo should not be disturbed. In fact, 42 percent believe that nothing more should be done about cigarettes until the cigarette manufacturers are given a reasonable amount of time to come up with a safer cigarette. While this is a decrease from the 46 percent holding this point of view in 1970, it is surprising that such a large proportion still agree with this.

Approximately the same proportion, 40 percent, agree that the general public knows all it needs to know about the effects of smoking on health. In 1970, 43 percent of the public agreed with this statement. This seems to indicate a willingness of more people in having information about the hazards of cigarette smoking disseminated to the public. Only about one in five view cigarette smoking as a minor problem, the same as in 1970.

C. Remedial Action - Exemplars

More than three out of every four respondents feel that teachers, doctors and other health professionals should set a good example by not smoking cigarettes. For each of the three groups, there is an increase over that found in 1970. While it is understandable that fewer smokers than non-smokers agree, it is significant that almost two out of three smokers feel that members of these groups should set an example.

D. Remedial Action - Setting Limits

There has been a growing feeling that non-smokers have a right to be allowed to breathe air free from the contaminants in cigarette smoke. The most dramatic change in attitude over the

years is toward the statement, "The smoking of cigarettes should be allowed in fewer places than it is now". Only 52 percent agreed with this statement in 1964 and 1966, but 57 percent agreed in 1970, and 70 percent in 1975. Between 1970 and 1975, this increase took place among current smokers (from 42 percent to 51 percent), among former smokers (from 61 percent to 77 percent), and among those who have never smoked (68 percent to 82 percent). This means that more than half the smokers at the present time would like to see smoking allowed in fewer places than it is now, despite the fact that there are more and more restrictions on places where people are allowed to smoke.

Since so many people would like to see smoking allowed in fewer places, it is not surprising to find that nearly two-thirds (63 percent) of the respondents say that it is annoying to be near a person who is smoking cigarettes. Ten years ago less than half of the total number of respondents (46 percent) agreed with this, and now even more than a third of the smokers (35 percent) do so.

A ban on cigarette advertising was advocated by a little over one-third (36 percent) of the 1964 respondents. By 1970, this had increased to 60 percent. Since then, television and radio commercials advertising cigarettes have been banned. Because these two media were the most widely used for advertising cigarettes, it might be presumed that such a ban would satisfy the public. This is not so. In 1975, 56 percent believed that cigarette advertising should be stopped completely. This view is subscribed to by 51 percent of the men and 60 percent of the women. Two out of five smokers would like to see cigarette advertising stopped, perhaps because some smokers who are trying to quit find that the advertisements make it more difficult. A second possibility is that, while they continue to smoke, they are loath to see the younger generation take it up.

Because of the growing feeling that smoking should be regulated more stringently, questions were added to the 1975 survey to explore the matter of regulation more fully.

First, the question, "Do you favor stronger Federal regulations concerning cigarette smoking?" elicited 52 percent "yes" responses from men and 60 percent from women. More than 40 percent of current smokers even favor such regulations.

Another area explored was whether management does or does not have the right to prohibit smoking in its place of business. Only 16 percent of the respondents felt that management should not have the right, while 78 percent thought they should have the right; the other 6 percent were undecided. Eighty percent of the women and 75 percent of the men thought that management should have the right to prohibit smoking. Of those who felt this way, 28 percent believed that they should be able to do this only when smoking is a

safety hazard, while 72 percent said they should have this privilege whether it is a safety hazard or not.

Respondents were asked if they found it annoying to be near a person smoking cigarettes. Those who said "yes" were asked whether they found cigarette smoking more annoying than several other things that might be bothersome. The majority of these respondents expressed the belief that cigarettes are more annoying than smoking a pipe, cracking knuckles, chewing gum, and humming or whistling. At the same time, a greater number of people said that smoking cigars is more unpleasant than cigarettes, and about the same number found cigarette smoking more annoying than drinking alcoholic beverages as found drinking alcoholic beverages more irritating than smoking.

E. Present versus Future Orientation

Two groups of statements were included in the 1975 survey that do not mention cigarette smoking, but were hypothesized as being related to smoking behavior. One group of statements explores attitudes toward planning ahead as opposed to enjoying the present.

Three out of four respondents agree that having money put aside for a rainy day makes them happier than spending it now. More non-smokers than smokers agree with this statement (77 percent and 73 percent, respectively).

Three out of four respondents also agree that one of the things they enjoy most is planning ahead. More non-smokers (79 percent) than smokers (72 percent) express agreement with this, and a larger proportion of men (79 percent) than women (74 percent) agree.

Less than half (42 percent) of the respondents agree that it is better to just take things as they come than to try to prepare for something that might happen in the future. Again, more smokers than non-smokers tend to be oriented to the present (45 percent and 41 percent, respectively).

F. Fatalistic versus Control Orientation

Based on the theory that those who continue to smoke tend to believe that they have little or no control over what happens to them, statements were included to test this hypothesis.

More smokers than non-smokers believe that what happens to people depends largely on luck or fate (44 percent of smokers and 37 percent of non-smokers agree). There is no difference between former smokers and those who have never smoked.

There was practically no difference between smokers and non-smokers in agreement with the statement that working hard is no guarantee of success if fate is against you (42 percent and 40 percent, respectively).

Approximately one in three (32 percent) of the respondents think that the best way to get ahead in life is to have good luck. There was no difference between smokers and non-smokers, but former smokers agreed to a lesser extent.

FACTOR SCORES

Table A shows mean and standard deviation of scores on six factors, hypothesized and tested through factor analysis techniques of the 18 attitude statements. These scores were obtained by assigning values of 1 to 5 according to the respondent's answer on the Strongly Agree-Strongly Disagree continuum. In most cases, Strongly Agree was assigned a score of 5, Mildly Agree a score of 4, No opinion a score of 3, Mildly Disagree a score of 2, and Strongly Disagree a score of 1. There were three statements per factor, and scores on these three-item factors had a range of from 3 to 15.

Factor 1, called Smoking and Health, measures the extent to which the respondent agrees that there is a causal relationship between smoking and disease. The higher the score, the greater the acceptance of such a relationship. The items in this factor are:

a. Cigarette smoking frequently causes disease and death.
g. Cigarette smoking is harmful to health.
m. Cigarette smoking is enough of a health hazard for something to be done about it.

Factor 2, labeled Remedial Action - General, tests the attitude for or against "disturbing the status quo." A high score means that the respondent feels that the problem isn't very important; nothing more should be done about it. Items are:

d. The general public knows all it needs to know about the effects of smoking and health.
j. Nothing more should be done about cigarettes until the cigarette manufacturers are given a reasonable amount of time to come up with a safer cigarette.
p. The whole problem of cigarette smoking and health is a very minor one.

Factor 3, Remedial Action - Exemplars, is a measure of the respondent's attitude toward the responsibility for setting a good example by certain authority figures--doctors, persons in various other health professions, and teachers. A high score reflects the feeling that these groups should set a good example by not smoking. Items in this cluster are:

b. Teachers should set a good example by not smoking cigarettes.
h. People in the health professions should set a good example by not smoking cigarettes.
n. Doctors should set a good example by not smoking cigarettes.

Factor 4, Remedial Action - Setting Limits, concerns attitudes toward "doing something about" the cigarette smoking problem. A high score indicates that the respondent is in favor of remedial action. The items making up this cluster are:

e. Cigarette advertising should be stopped completely.
k. The smoking of cigarettes should be allowed in fewer places than it is now.
q. It is annoying to be near a person who is smoking cigarettes.

Factor 5, Present versus Future Orientation, determines the extent to which a person is willing to delay present gratification for future satisfaction. A high score is indicative of this willingness. The first statement in this cluster (f) states the opposite view--a preference for taking things as they are rather than preparing for the future. Therefore, this item is scored in reverse. That is, Strongly Agree was assigned a score of 1 and Strongly Disagree was given a score of 5. The items are:

f. It is better to just take things as they come than to try to prepare for something that might happen in the future.
l. Having money put aside for a rainy day makes me happier than spending it now.
r. One of the things I enjoy most is planning ahead.

Factor 6, Fatalistic versus Control Orientation, is a bipolar measure with "destiny control" at one end and "luck" or "fate" at the other end. Because of the way in which the items are worded, a high score describes a strong feeling of dependence on "luck". Items are:

c. What happens to people depends largely upon luck or fate.
i. Working hard is no guarantee of success if fate is against you.
o. About the best way to get ahead in life is to have good good luck.

The average score on Factor 1, Smoking and Health, was higher for non-smokers than for smokers, as might be expected. Even current smokers, however, show a high acceptance of the causal relationship between smoking and disease, with a mean score of 11.73 out of a possible maximum score of 15. Women obtained slightly higher scores than men.

On Factor 2, Remedial Action - General, a high score indicates agreement with the attitude that no further action should be taken with regard to cigarette smoking. Current smokers are most inclined to subscribe to this opinion, those who have never smoked next, and former smokers are least likely to agree.

Non-smokers have higher average scores on Factor 3, Remedial Action - Exemplars, than do smokers. Smokers are much less likely to agree that people in an exemplar role should refrain from smoking than are non-smokers, perhaps because of smokers' awareness of the difficulties encountered in not smoking. Those who have never smoked are most likely to want these people to set an example. Overall, women have higher scores than men on this factor.

On Factor 4, Remedial Action - Setting Limits, higher scores are found among the non-smokers than among the smokers, as would be expected. Women are more likely than men to want to set limits on cigarette smoking.

The measure of present versus future orientation, Factor 5, does not relate to attitudes toward cigarette smoking. However, non-smokers are slightly more likely to be future-oriented than are smokers. If we postulate that smokers are reluctant to delay present gratification for future gains and, at the same time, tend to minimize the health hazards of cigarette smoking, the findings from Factors 1 and 5 substantiate the hypothesis.

On Factor 6, it was found that former smokers are more inclined than either current smokers or those who have never smoked to believe that they have control over what happens to them. The fact that they have overcome a difficult habit which current smokers have not done and that never smokers have not had to face lends credence to this finding.

To summarize the results of the data, a current smoker is more apt to discount the health hazards of cigarette smoking, to agree that no further action should be taken about smoking, to disagree with statements that certain groups should be exemplary by refraining from smoking, to express reluctance with the idea of setting more prohibitive limits on future gratification, and to believe that what happens to them mostly depends on luck or fate.

G. Weight Gain

There is a widespread belief that being afraid of gaining a lot of weight keeps people from quitting cigarettes. In fact, 50 percent of the men and 60 percent of the women agree with this statement. Surprisingly enough, more non-smokers than smokers subscribe to this belief (57 percent and 53 percent, respectively).

H. Values

In order to obtain some measure of the value the respondent places on "being healthy" compared to other desirable goals in life, a series of forced choices were presented. For example, the respondent was asked, "Which is more important to you, having a good family life or being healthy?" In six of the statements presented, "being healthy" was compared with some other value. There were five "filler" pairs that did not present a choice with "being healthy". In every case, being "healthy" was chosen more often than the other alternative. In order to get an estimate of how much value each respondent places on health, a score was developed by counting the number of times he chose health over the other alternatives. These scores range from zero to six with six representing the greatest concern about health. Among men, former smokers were more likely than never smokers to obtain a score of six, and they (never smokers) were more likely than current smokers to obtain a score of six. Among women, the same proportion of never and current smokers obtained a score of six, with more former smokers obtaining this score. Women in every smoking category were more likely to obtain a score of six than men in the same category. This finding could be expected since women, traditionally, have responsibility for the health and well being of the family.

I. Attitudes Toward Effect on One's Own Health

1. Two out of three smokers are concerned about the possible effects of cigarette smoking on their health. In fact, one in four smokers is very concerned. There is practically no difference between men and women in response to this question.

2. When asked their opinion about the relative hazards of different kinds of cigarettes, 40 percent of the respondents say that some kinds of cigarettes are probably more hazardous to health than other, 52 percent agree that all cigarettes are probably about equally hazardous, while less than 3 percent (mostly smokers) think that cigarettes are probably not hazardous

at all. Smokers are more likely than non-smokers to believe that some cigarettes are more hazardous than others (51 percent of the smokers and 34 percent of the non-smokers). Half of the smokers who think there are differences among kinds of cigarettes believe that the kind they smoke is probably less hazardous to health than others. More women than men (56 percent and 47 percent, respectively) subscribe to this. It is true that women tend to smoke cigarettes lower in tar and nicotine than do men.

3. Two-thirds of those with a history of smoking say that they have never been advised by a doctor to quit smoking or to cut down. Among current smokers, a few more women than men (38 percent and 35 percent) report that a doctor has advised them to do something about their smoking.

III. Perception of Environment

A. 20 "Adults You Know"

Respondents have a tendency to overestimate the prevalence of smoking in the adult population. Although fewer than 7 in 20 adults are smokers, nearly half (48 percent) of the respondents think that 11 or more of 20 adults they know are smokers. More males than females (53 percent and 43 percent) perceive this number of smokers among 20 adults they know, and more smokers than non-smokers (63 percent and 40 percent) have this perception. The latter might be attributed to two phenomena: (1) Smokers may actually be acquainted with more smokers than non-smokers, and (2) smokers may tend to perceive others as being like themselves, and so overestimate the actual number of smokers among their friends and acquaintances.

It is significant to learn that in the five-year period from 1970 to 1975, when there was a slight decrease in smoking prevalence, there was also a corresponding decrease in the perception of prevalence. Using the arbitrary cutoff of knowing 11 or more smokers out of 20, the proportion perceiving this smoking rate dropped from 57 percent to 53 percent among men, and from 46 percent to 43 percent among women.

B. Smoking Behavior of Family Doctor

Of those who reported having a family doctor, 22 percent of the men and 18 percent of the women report that their doctor smokes; 52 percent of the men and 54 percent of the women say he doesn't smoke, and 26 percent of the men and 29 percent of the women really don't know whether their doctor does or doesn't smoke. (Only about 10 percent of the men and 6 percent of the women in the sample reported that they do not have a family doctor.)

For both sexes, the 1975 data show a decrease in the proportion who think their doctor is a smoker. The decrease is from 24 percent to 22 percent among men and from 22 percent to 18 percent among women. This may reflect a decrease in the prevalence of smoking among physicians, or it may stem from a change in what the general population believes.

Smokers are more likely to report that their doctors smoke than are non-smokers. The percentages are 25 percent and 20 percent for men, and 22 percent and 16 percent for women. Whether the doctor actually smokes or not, smokers are more likely to perceive that their doctors smoke.

C. Personal Knowledge of Effect on Health

1. Health in General. A little over half (52) percent of the respondents say that cigarette smoking has affected the health of someone they personally know--such as a family member, a friend, themselves, someone at work, or some other acquaintance. This is an increase from 46 percent in 1970, and it may reflect greater knowledge of the harmful effects of smoking.

As in 1970, smokers are much less likely than non-smokers to report that they know someone, including themselves, whose health has been affected by smoking. Only 35 percent of the smokers say that they know someone whose health has been affected by smoking, while 61 percent of non-smokers claim knowlege of someone with a health condition induced by smoking. It is possible that smokers suppress this knowledge in order not to feel too much concern or guilt about their smoking.

2. Personal knowledge of Someone with Coronary Heart Disease, Lung Cancer, and Emphysema or Chronic Bronchitis.
Just as there has been an increase in the proportion who respond positively to the general question about knowing someone whose health has been affected by smoking, there is a corresponding increase in positive responses to two of the three specific diseases they were questioned about that are associated with cigarette smoking. Positive responses to the question about coronary heart disease increased from 47 percent to 53 percent; those to the question about emphysema or chronic bronchitis increased from 50 percent to 56 percent. The proportion reporting that they have known someone with lung cancer remained about the same (33 percent in 1970 and 35 percent in 1975). These increases were evidenced in both sexes and among smokers and non-smokers.

For each of the three diseases, as with the general health question, smokers are much less likely to give a positive response than are non-smokers. For example, 47 percent of smokers say they have known someone with coronary heart disease, while 56 percent of non-smokers say they have. Comparable proportions for lung cancer are 27 percent of smokers and 39 percent of non-smokers; for emphysema and chronic bronchitis, 51 percent and 58 percent. At first glance, we might think that smokers who have known someone with one of these diseases have quit smoking. This explanation is not tenable, however, in view of the fact that there is little difference in the way former smokers answer these questions in comparison with those who have never smoked. Smokers are slightly younger than non-smokers, so that older non-smokers may be more likely to observe these diseases in themselves and in their friends. It is also possible that there is some element of denial and rejection in the smokers' responses.

IV. Smoking History

The questions on smoking history were asked only of former smokers and current smokers.

One-half the males and one-third of the females with a history of smoking were regular smokers at age 17 or younger. Only 6 percent of the males and 18 percent of the females became regular smokers at age 25 or older.

Among males, there was a tendency for current smokers to report they started smoking earlier than did former smokers. For example, 53 percent of current smokers reported age 17 or younger as the time they became regular smokers compared with 48 percent of former smokers. Such differences were not observed among females.

The majority of current smokers (61 percent) have, at least once, made a serious attempt to stop smoking cigarettes entirely. Of those who have not, about one-half say that if there were an easy way they would try it, about one-fourth say "probably" or "it depends," and only one-fourth say "no," they would not try it. So, overall, 9 out of 10 smokers have either tried to quit smoking or would probably do so if there were an easy way to do it.

Two-thirds of the men and three-fourths of the women who are current smokers have tried to just cut down the number of cigarettes they allowed themselves without trying to stop smoking entirely. The proportion of former smokers who have tried this is much smaller--50 percent of the men and 46 percent of the women.

Although a majority of smokers apparently would like to quit, 57 percent say they will either definitely or probably be smoking 5 years from now. Very few of the non-smokers (1.5 percent) expect to be doing so.

Current smokers are, in general, smoking fewer cigarettes a day now than they were during that period of life when they were smoking their heaviest. Among men, 36 percent now smoke 25 or more cigarettes a day, but at their heaviest, 42 percent were smoking 25 or more a day. Corresponding percentages for female current smokers are 23 percent and 26 percent.

On the average, men have smoked cigarettes for more years than have women. Men current smokers have smoked an average of 24 years compared with 21 years for women. Male former smokers smoked an average of 19 years before they quit; females, an average of 15 years.

Most former smokers (70 percent) have not smoked in more than 4 years. Fewer than 10 percent had quit within the year before they were interviewed.

V. Dosage

A. How the Cigarette is Smoked.

Many current smokers smoke their cigarettes in such a way as to maximize the hazards. For example, more than half say that they draw the smoke into the chest (54 percent), and an almost equal number say that they inhale almost every puff of each cigarette (55 percent).

When asked how much of each cigarette they smoke, 44 percent report that they smoke more than half. As a rule, most smokers say that not much of their cigarettes burn without being smoked; fewer than 15 percent say that "a great deal" of the cigarette burns in this way. In general, men smoke in a more hazardous way than do women, and former smokers reported that they did so more than do current smokers.

B. Average Number of Cigarettes Smoked Per Day

An important measure of dosage is the number of cigarettes smoked each day. Men smoke more cigarettes a day than do women, with the average for men being 23 cigarettes a day, and for women 19. This represents no change for the men, but an increase from an average of 17 cigarettes a day for women who were smokers in 1970. While 36 percent of the men smoke 25 or more cigarettes a day, only 23 percent of the women smoke this many cigarettes. Former male smokers are more likely to say they smoked this many cigarettes than do current men smokers.

C. Type of Cigarette

Most current smokers use filter-tipped king-size cigarettes (61 percent of the men and 54 percent of the women). More women than men tend to smoke 100 mm cigarettes (35 percent and 17 percent, respectively), and also menthol cigarettes (32 percent of the women; 23 percent of the men).

Women are more likely than men to buy cigarettes by the carton than by the pack (60 percent and 51 percent, respectively).

VI. Other Forms of Tobacco

A. Snuff and Chewing Tobacco

Only 3 percent of the men and 1 percent of women use snuff, and not many more use chewing tobacco--5 percent of the men and less than 1 percent of the women. A larger proportion of the men, 16 percent, have chewed tobacco in the past but no longer do so. There is very little change since 1970 in the use of either of these forms of tobacco.

B. Cigars and Pipes

Both of these forms of tobacco are used almost exclusively by men, with only about one-half of one percent of women using either.

About 18 percent of the men smoke cigars, and another 25 percent used to smoke them. More current cigarette smokers than non-smokers are cigar smokers (26 percent and 13 percent, respectively), while the largest preponderance of ex-cigar smokers (41 percent) is among the former cigarette smokers. More than 35 percent of the ex-cigar smokers quit smoking cigars ten or more years ago, and another 19 percent quit between 4 and 10 years ago.

Almost half the men (47 percent) have a history of pipe use, with only about one-fourth of these current pipe smokers. There was a decrease in pipe smoking since 1970, from 18 percent to 12 percent. As in 1970, current cigarette smokers are more likely to be pipe smokers than are former smokers or those who have never smoked. Of those who smoked a pipe at one time and no longer do so, almost half (46 percent) quit 10 or more years ago.

VII. Changes in Smoking Behavior

During the years that a person smokes cigarettes, he is likely to change his smoking behavior in some way. For example, 12 percent of the male current smokers have at some time changed to or smoked more cigars, and 18 percent changed to pipe or smoked a pipe more often. Thirteen percent of current smokers increased the amount of each cigarette smoked while 10 percent smoked less of each cigarette. Ten percent of the males and 61 percent of the females changed completely, at least once, to a different brand of cigarettes.

CHART I
PROPORTION OF SMOKERS IN ADULT POPULATION
1964-1975

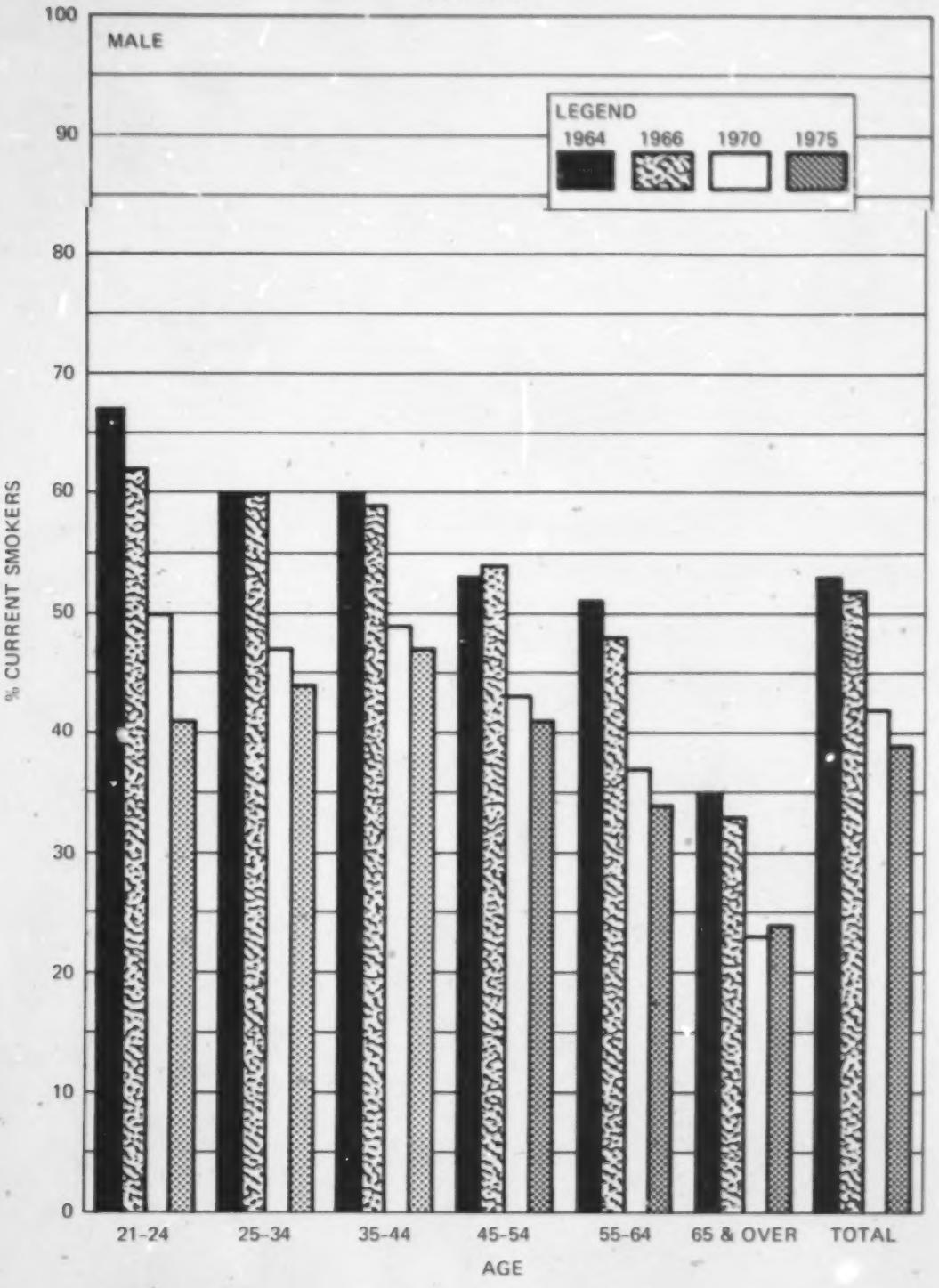
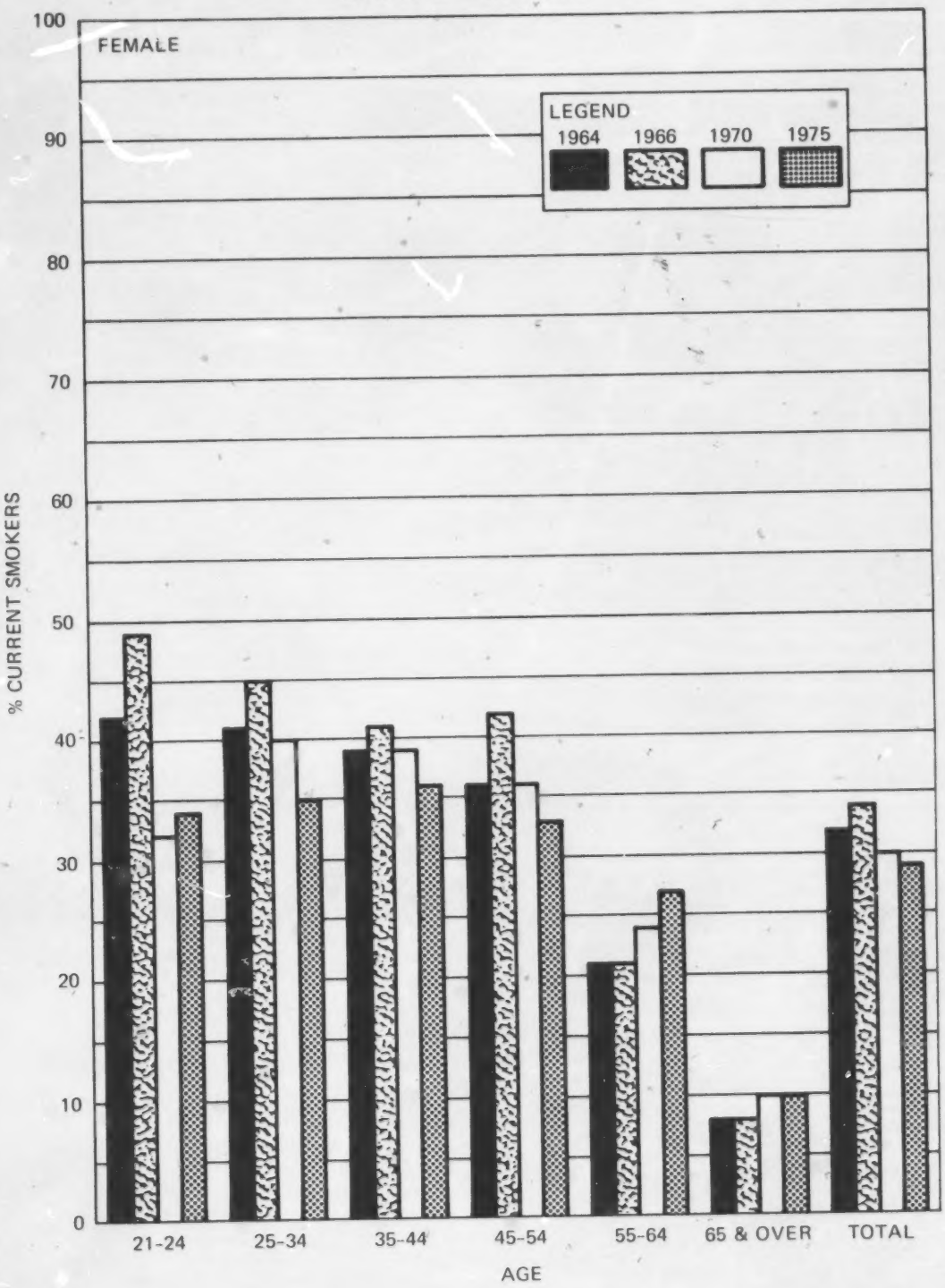


CHART I
PROPORTION OF SMOKERS IN ADULT POPULATION
1964-1975 – Continued



FACTOR SCORES - TABLE A

Means and Standard Deviations

	Never		Former		Current		Total	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1. Smoking and Health								
Male	13.67	2.06	13.56	2.25	11.67	3.33	12.85	2.84
Female	13.88	2.06	13,92	1.87	11.79	3.29	13.29	2.63
Total	13.81	2.06	13.69	2.13	11.73	3.31	13.08	2.74
2. Remedial Action - General								
Male	7.09	3.24	6.87	3.27	8.23	3.38	7.47	3.36
Female	7.07	3.26	6.63	3.15	8.16	3.34	7.32	3.31
Total	7.08	3.26	6.78	3.23	8.20	3.36	7.39	3.34
3. Remedial Action - Exemplars								
Male	12.89	3.05	12.69	3.28	10.62	4.05	11.94	3.69
Female	13.60	2.51	12.91	3.12	10.44	4.07	12.59	3.42
Total	13.36	2.72	12.77	3.23	10.54	4.06	12.28	3.56
4. Remedial Action - Setting Limits								
Male	11.72	3.13	11.22	3.33	8.54	3.72	10.32	3.72
Female	12.48	2.89	11.95	3.16	8.62	3.71	11.29	3.62
Total	12.23	3.00	11.48	3.29	8.57	3.71	10.83	3.70
5. Present - Future								
Male	11.56	2.57	11.74	2.60	11.12	2.95	11.44	2.74
Female	11.25	2.72	11.19	2.89	10.55	3.12	11.04	2.88
Total	11.35	2.67	11.54	2.72	10.86	3.04	11.23	2.82
6. Fatalistic Control								
Male	7.93	3.59	7.65	3.63	8.09	3.69	7.91	3.64
Female	8.13	3.54	7.42	3.47	7.91	3.66	7.96	3.57
Total	8.06	3.56	7.57	3.57	8.01	3.68	7.94	3.61

HEALTH SCORES - TABLE B
(Number of times health is chosen over other values)

Means and Standard Deviations

	Never		Former		Current		Total	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Male	4.68	1.38	4.78	1.34	4.55	1.43	4.66	1.39
Female	4.90	1.24	5.06	1.24	4.81	1.37	4.90	1.29
Total	4.82	1.30	4.89	1.31	4.66	1.41	4.78	1.34